GILA RIVER BASIN

09484590 DAVIDSON CANYON WASH NEAR VAIL, AZ

LOCATION.--Lat $31^{\circ}59'37''$, long $110^{\circ}38'40''$, $SW^{1}/_{4}SE^{1}/_{4}$ sec. 31, T.16 S., R.17 E., Hydrologic Unit 15050302, on right bank 0.3 mi upstream from Interstate Highway 10, 2.0 mi upstream from mouth, and 5.5 mi southeast of Vail. DRAINAGE AREA.--50.5 mi².

Annual peak discharges

Water year	Date	Annual peak discharge (ft ³ /s)	Discharge codes	Water year	Date	Annual peak discharge (ft ³ /s)	Discharge codes
1968	07-26-68	3,040		1975	07-08-75	708	
1969	08-05-69	587		1976	07-12-76	3,550	
1970	07-20-70	6,860		1977	09-10-77	2,400	
1971	08-10-71	1,490		1978	10-06-77	3,040	
1972	09-07-72	1,320		1979	08-15-79	105	
1973	10-19-72	28		1980	09-07-80	1,740	
1974	09-21-74	1,460		1981	07-27-81	4,480	

Magnitude and probability of instantaneous peak flow based on period of record 1968-81

Discharge, in ft ³ /s, for indicated recurrence interval in years, and exceedance probablility, in percent							
2 50%	5 20%	10 10%	25 4%	50† 2%	100† 1%		
1,900	3,430	4,640	6,380	7,800	9,340		
Weighted skew	(logs) =	-0.11					
Mean	(logs) =	3.27					
Standard dev.	(logs) =	0.31					

[†] Reliability of values in column is uncertain, and potential errors are large.

Basin characteristics

	Stream length (mi)	Mean basin elevation (ft)	Forested area (percent)	Soil index	Mean annual precipitation (in)	Rainfall intensity, 24-hour	
Main channel slope (ft/mi)						2-year (in)	50-year (in)
86.2	13.6	4,340	0.0	1.0	14.9	1.9	4.1

